

Remarks

Claims 1-16 are currently pending in the present application. Claims 5, 9-12 and 15 are withdrawn as allegedly being directed to a non-elected invention.

In the Action mailed January 26, 2005, the examiner rejected claims 1-4, 6-8, 13 and 14 under 35 U.S.C. section 103(a) as allegedly being obvious over U.S. Patent No. 4,450,087 to Askew et al., or U.S. patent No. 3,903,006 to Elliott et al.

In response to the rejection applicants provide the following distinguishing remarks that are believed to place the present case in condition for allowance. Favorable reconsideration of all of the pending claims is respectfully requested.

Initially, the examiner indicated that claims 1-4, 6-8 13, 14 and 16 were rejected under 35 U.S.C. §112, second paragraph... but did not provide any grounds for the rejection. Clarification is respectfully requested.

The withdrawal of the rejection of claims 1-4, 6-8 13, 14 and 16 under 35 U.S.C. §102(b) is acknowledged.

Concerning the rejection of claims 1-4, 6-8, 13 and 14 under 35 U.S.C. section 103(a) over Askew et al. or Elliott et al., the examiner states the following:

The Applicants' arguments and showing are sufficient to overcome the rejection with respect to the compounds having the claimed (I), when  $n_2$  is at least 1. However, when the  $n_2$  is 0 the claims are still considered to be obvious over Askew et al. and Elliott et al. because the showing did not include compounds wherein  $n_2$  was zero. Askew et al. and Elliott et al. also suggest compounds wherein  $n_2$  is zero. Thus, the showing is not commensurate in scope with the protection sought.

It appears that the examiner has accepted applicants' arguments and showing of the superiority of the compounds according to our invention where  $n_2$  is at least 1, but not

for compounds where  $n_2$  is zero. Applicants submit that showing of effects resulting from compounds having at least one hydrophobic and at least one hydrophilic ortho ester substituent are equally applicable to compounds lacking propyleneoxy units in the hydrophobic substituent, since the substituent having only a hydrophobic alkyl group **would still be hydrophobic**. However, in order to strengthen our proof some additional tests were performed with compounds where the hydrophobic substituent is only an alkyl group without any propyleneoxy units, i.e., where  $n_2$  is zero. Those tests are reported in the attached **Second Declaration Under 37 C.F.R. § 1.132**.

Concerning the actual data in applicants' Declaration, applicants tested two parameters: static surface tension and wetting according to Graves. In both of these tested parameters, the compounds of the invention A, B and C, which are ortho ester surfactants having  $n_2=0$ , gave unexpectedly superior results, especially when compared to the compounds of Askew et al. More specifically, the surface tension values for the claimed ortho esters where  $n_2$  is 0 were as follows:

A: 27.5nN/m

B: 30.0 nN/m

C: 29.8 nN/m.

These surface tension values are considerably lower than the closest comparison products of Askew et al., which had values of 37.1 and 59.7 respectively by the same test method (See First Declaration).

Likewise, the wetting times for compounds A, B and C of the invention demonstrate significant and unexpectedly superior wetting capacity, especially when compared to the products of Askew, which have virtually no wetting capacity. (See First Declaration where the compounds of Askew et al have wetting times of greater than 600 seconds.)

Applicants respectfully submit that the data presented in the Second Declaration and discussed herein clearly demonstrate the surface tension and wetting capabilities of the compounds according to the claimed invention where  $n_2$  is 0. The data clearly

addresses the only remaining issue identified by the examiner and supports the conclusion that the compounds of the present invention are unexpectedly superior surfactants compared to the compounds of Askew et al.

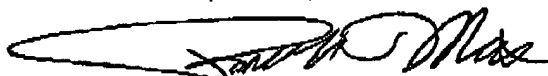
Applicants' comments regarding Elliott et al. in their previous response are repeated and incorporated herein by reference. The disclosed esters of Elliott are believed to be no closer to the compounds of the claimed invention than are those of Askew et al. In fact, applicants submit that the compounds of Askew et al. are closer to the claimed invention than those of Elliott. As such, applicants have demonstrated that the claimed compounds are unexpectedly superior to the closest compounds of record, i.e., the compounds of Askew et al. That same data is believed equally pertinent to Elliott and clearly evidences that patentability of the invention thereover.

In view of the foregoing, applicants respectfully submit that the rejection of claims 1-4, 6-8, 13 and 14 under 35 U.S.C. section 103(a) over Askew et al., Elliott et al. has been overcome; reconsideration and withdrawal thereof is respectfully requested.

An executed copy of the **Second Declaration Under 37 C.F.R. § 1.132** will be submitted as soon as it is received back from the inventor.

Therefore, in view of the remarks herein, the present case is believed to be in condition for allowance, which action is respectfully solicited.

Respectfully submitted,



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